

TWO NEW SPECIES OF *CORTICEUS* FROM FLORIDA AND THE
WEST INDIES (COLEOPTERA: TENEBRIONIDAE)

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Abstract.—Two new species of *Corticeus*, *C. tensicollis* from Florida, Cuba, Puerto Rico, Haiti and Dominican Republic and *C. tuberculatus* from Cuba, are described. Characters which separate them from other large, Neotropical species of *Corticeus* are presented.

Anticipating an eventual review of the Western Hemisphere components of the genus *Corticeus*, I wish to make known the following two new species at this time.

Grateful acknowledgment is expressed to a number of curators and institutions for the loan of specimens upon which this paper is based. The institution, abbreviation used in the text and curator(s) in charge are as follows: United States National Museum of Natural History, Washington, D.C. (USNM), T. J. Spilman; Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts (MCZC), J. F. Lawrence; American Museum of Natural History, New York (AMNH), Lee H. Herman, Jr.; Florida State Collection of Arthropods, Gainesville, (FSCA), R. E. Woodruff; Carnegie Museum, Pittsburgh, Pennsylvania (ICCM), George Wallace; Zoologische Sammlung des Bayerischen Staates, Munich, West Germany (ZSBS), Gerhard Scherer; The Ohio State University Collection of Insects and Spiders, Columbus (OSUC), C. A. Triplehorn.

Corticeus tensicollis Triplehorn, NEW SPECIES

Holotype, male.—Elongate, very slender, subcylindrical, dark reddish brown, glabrous, shining. Head uniformly finely and densely punctured; clypeus well defined and swollen medially; antennae with segments 5-10 short but broadly expanded laterally, apical segment lighter in color, longer and rounded apically; eyes coarsely faceted, separated dorsally by almost 3× the observed dorsal diameter of one eye and ventrally by much less than the observed ventral diameter of one eye; ventral surface of head with only a few fine, widely separated punctures. Pronotum long and narrow (width = 0.7 length), convex, lateral margins parallel, marginal bead very fine, apical margin strongly rounded, angles abruptly acute and prominent, base feebly

rounded, prominently beaded, angles obtuse; surface finely and sparsely punctured, most punctures separated by at least their own diameters. Elytra slightly wider than pronotum, with distinct rows of fine, closely spaced punctures forming striae, only the 1st and 2nd (adjacent to suture) lying in sulci, lateral striae obsolete; intervals subconvex near suture, becoming flat laterally, with a single row of minute punctures on each; pygidium finely and densely punctured. Ventral surface concolorous with dorsum, legs somewhat lighter in color; flanks of prothorax coarsely but shallowly and densely punctured; prosternum finely punctate with wavy, transverse sculpturing; prosternal process narrow between coxae, expanded apically into 2 prominent lobes; mesosternum and mesepisternum coarsely and confluent punctured; metasternum with obvious though weak carina progressing obliquely caudad from mesocoxa and becoming vague posteriorly, sparsely and minutely punctured except laterally where punctures are coarser and shallower but still widely separated; abdominal sterna with deep lateral grooves, basal 3 sterna finely and sparsely punctured except on flattened median area on segments 1 and 2 where punctures are larger, 4th segment more coarsely and densely punctured, 5th segment still more coarsely, almost confluent punctured. Length 6.2 mm; width 1.5 mm.

Types.—Holotype, Paradise Key, Florida, 9 March (no year or collector indicated); 4 paratypes, Miami, Florida, 15 November 1947; 4 paratypes, Miami, Florida, June 1948; 4 paratypes, Homestead, Florida, 16 November 1931; 2 paratypes, Biscayne Bay Florida (no date or collector); 1 paratype, Broward County, Florida (no date); 1 paratype, Dade County, Florida, June, 1930. Holotype in USNM; paratypes in FSCA, MCZC, USNM, OSUC, ICCM, AMNH, and ZSBS. Additional specimens studied (26) Cayamas, Cuba, 14 January to 11 February, (no year indicated), E. A. Schwarz, on ceiba; (2) Cayamas, Cuba, Baker (no date), (3) Higueral, Dominican Republic, 12 April 1913, J. R. Johnston; (1) Port au Prince, Haiti, R. J. Crew, all in USNM; Upper Ovando River, eastern Oriente Province, Cuba (1000–2000 ft.), 17–20 July 1936, Darlington; (2) Soledad, Cienfuegos, Cuba, 28 October 1926, Darlington; (3) San Juan de los Remedios, Cuba, H. Bryant; (7) Jarabacoa, Dominican Republic (1500–4000 ft.), August, 1938, Darlington, all in MCZC; (1) Cayey, Puerto Rico, 1920, G. N. Wolcott; (3) Higueral, Santo Domingo; (1) Cuba, all in AMNH.

Discussion.—There is obvious sexual dimorphism involving the basal two abdominal sterna and the pro- and metathoracic legs. The male has the middle portion of the first abdominal sternum (sometimes the second sternum also) flattened or concave, with distinctly coarser punctures than the outer portions of the sclerite; in the female these two sterna are uniformly convex with punctures subequal throughout. The male protibia has long, dense, golden setae on the anterior surface, with the ventral surface obviously incurved along apical three-fourths; the metatibia is stouter, sud-

denly though slightly narrowed near base. The female protibia has much shorter golden setae on the anterior surface, with the ventral surface almost straight; the metatibia is slenderer and evenly narrowed from apex to base.

Measurements.—Length 5.0–7.5 mm; width 1.2–1.8 mm.

The presence of this large, elongate species of *Corticeus* in Florida has been known for a long time. It has been misidentified as *C. mexicanus* (Reitter) in several collections, perhaps as a result of the listing of that species in the Leng Catalogue from Florida, even though the name was preceded by a question mark.

Through the courtesy of Dr. Gerhard Scherer, Zoologische Sammlung des Bayerischen Staates, Munich, Germany, I was able to borrow a Reitter cotype of *C. mexicanus* and verify the identity of that species. I was aware that the Florida species differed markedly from specimens I had on hand from Central America and which I presumed to be *C. mexicanus*. Examination of the cotype and study of an adequate series from Central America confirmed my suspicions that the Florida species was undescribed.

Corticeus mexicanus is of stouter proportions than *C. tenticollis*, the pronotum is shorter (width = 0.8 length) and the ventral surface is more coarsely punctured. Males of *C. mexicanus* are very distinct in having the medial portion of the basal abdominal sternum flattened and rugosely sculptured between and behind the metacoxae with a distinct median carina ending in a tubercle. In addition, there is a dense, conspicuous patch of short, pale setae on the prosternum immediately behind the head. These two structures are absent in the female of *C. mexicanus* and in both sexes of *C. tenticollis*. Both structures were clearly visible on the cotype studied even though it was glued dorsal side up on a card.

I have seen specimens of *C. mexicanus* from Mexico, Guatemala, Nicaragua, Panama and Colombia.

Corticeus tenticollis is more similar to *C. rufipes* (Fabricius) than to any other New World species. The two may be separated by several characters in addition to the male genitalia. *Corticeus rufipes* is usually larger (up to 10 mm in length), the eyes are separated ventrally by about $1.5 \times$ the ventral diameter of one eye, and the elytral striae are better defined, at least 5 discal striae on each side of the suture situated in distinct sulci with convex elytral intervals.

I have seen specimens of *C. rufipes* from Mexico, Guatemala, Costa Rica, Panama, British Honduras, Nicaragua, Venezuela, Bolivia, Brazil and Trinidad.

Corticeus tuberculatus Triplehorn, NEW SPECIES

Figs. 2–3

Holotype, sex undetermined.—Elongate, stout, subcylindrical, dark reddish brown, shining; dorsal surface with scattered, widely separated, erect,

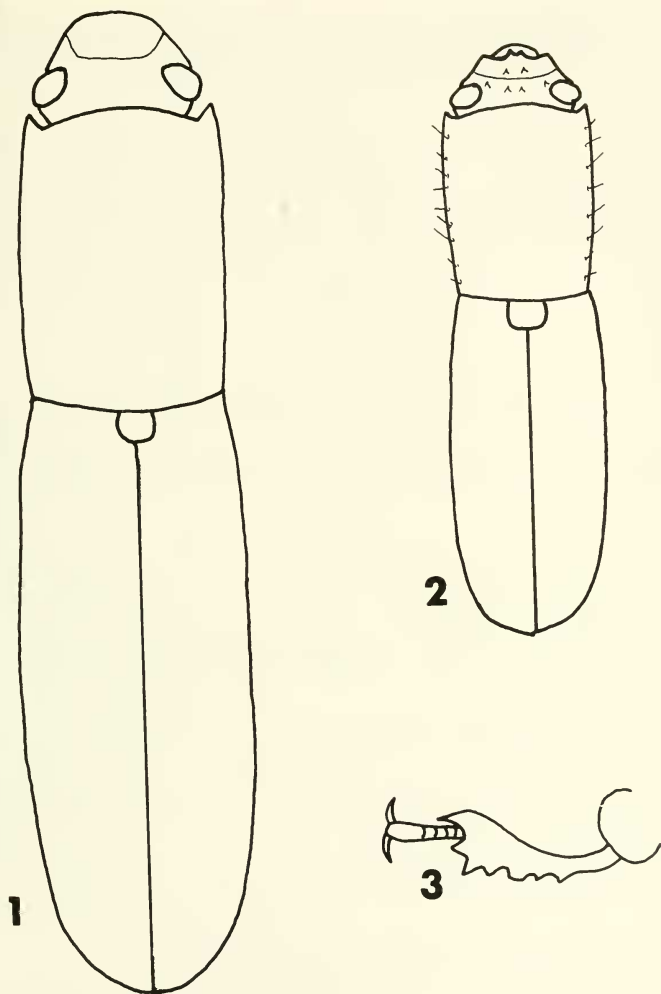


Fig. 1. *Corticeus tensicollis*, body outline in dorsal view. Figs. 2-3. *C. tuberculatus*. 2. Body outline in dorsal view. 3. Left prothoracic leg.

pale setae. Head with clypeus trapezoidal, sides straight, finely crenulate and distinctly reflexed, anterior angles prominent, epistoma subtruncate with 2 small, almost contiguous marginal tubercles, 2 similar, slightly separated tubercles at base of clypeus; interocular area smooth and shiny with 6 small tubercles; posterior portion of head coarsely and densely punctured, a transverse impression between eyes; antennae dark reddish brown, stout, subfusiform, segments 5-10 transverse, terminal segment narrower, elongate, rounded apically; eyes moderate, coarsely faceted, separated ventrally by almost 2× the observed ventral diameter of one eye; ventral surface of head with a few coarse but very shallow punctures, transversely impressed between eyes. Pronotum large (0.6 length of elytra), strongly convex; lateral margins straight and divergent from base to apex, apical margin truncate, strongly and abruptly deflexed medially, angles finely acute and prominent, basal margin nearly straight, basal angles rounded; lateral and basal margins finely beaded; surface coarsely and deeply punctured, punctures well separated on disc, much closer laterally, punctures more or less elliptical; lateral setae quite long. Elytra equal in width to base of pronotum, sides parallel, surface shallowly punctate-striate, intervals flat and minutely punctulate; elytral setae vaguely arranged in longitudinal rows, best seen in anterior or posterior views, longest near lateral margins; pygidium very finely punctate. Ventral surface finely and densely punctured, somewhat alutaceous, especially metasternum; prosternal process narrow between coxae, strongly expanded behind, truncate apically; legs light reddish brown; profemur expanded apically, grooved ventrally for reception of protibia; protibia expanded apically, outer margin strongly denticulate (Fig. 3); inner margin densely clothed with golden setae, apical spur large and strongly deflexed; dorsal surface of mesotibia finely denticulate; metatibia with large subapical tooth on dorsal surface. Length 3.5 mm; width 0.9 mm.

Types.—Holotype and 5 paratypes, Cayamas, Cuba, 14 January (no year indicated), E. A. Schwarz, on ceiba; 2 paratypes, same locality and collector but 21 January. Holotype and paratypes in USNM; paratype in OSUC.

Discussion.—There is not much variation in the type-series. Three of the specimens have a single epistomal tubercle instead of two and the number and arrangement of other tubercles on the head vary slightly (as few as 4 as in Fig. 2). The denticulations on the dorsal edge of the protibia are irregular, some large teeth and some small teeth on the same tibia, and with different combinations on the right and left tibia of a specimen.

Measurements.—Length 3.2-3.7 mm; width 0.82-0.96 mm.

This species has at least three unique characters, any one of which will distinguish it from all other known *Corticicus* in the Western Hemisphere: Head tuberculate, outer margin of profemur denticulate and anterior margin of pronotum deflexed. It is totally unlike any species known to me, and I am unable to speculate on its affinities.